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May 23, 2007

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APPLICATION NUMBER: 60/519,667

FILING DATE: November 13, 2003

RELATED PCT APPLICATION NUMBER: PCT/US04/14908

THE COUNTRY CODE AND NUMBER OF YOUR PRIORITY APPLICATION, TO BE USED FOR FILING ABROAD UNDER THE PARIS CONVENTION, IS US60/519,667



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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

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17858 U.S. PTO
60/519667



INVENTOR(S)					
Given Name (first and middle [if any])		Family Name or Surname		Residence (City and either State or Foreign Country)	
Gary L.		Hopkins, Sr.		Scottsburg, Indiana	
Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (500 characters max)					
MICROWAVE COOKING DEVICE FOR CRISPING					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number:		<div>24350</div>			
OR					
<input type="checkbox"/> Firm or Individual Name					
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages 6		<input type="checkbox"/> CD(s), Number _____			
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets 1		<input checked="" type="checkbox"/> Other (specify) Declaration/POA			
<input type="checkbox"/> Application Date Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.		<div>FILING FEE Amount (\$) \$80.00</div>			
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees.					
<input type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: _____					
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The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
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[Page 1 of 2]

Respectfully submitted,

SIGNATURE

TYPED or PRINTED NAME Mandy V. Wilson

TELEPHONE 502-587-3400

Date November 13, 2003

REGISTRATION NO. 53,781

(if appropriate)

Docket Number: ST288/OST20

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$120.00)

Complete if Known

Application Number
 Filing Date
 First Named Inventor Hopkins
 Examiner Name
 Art Unit
 Attorney Docket No. ST288/OST20

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	80.00
SUBTOTAL (1)			(\$ 80.00)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ -0-

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	40.00
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00

SUBMITTED BY

Name (Print/Type) Mandy V. Wilson Registration No. 53,781 Telephone 502-587-3400
 Signature [Signature] (Attorney/Agent) Date 11/13/03

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.
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CERTIFICATE OF EXPRESS MAILING

EV256525543US

Inventor: Gary L. Hopkins, Sr.

Title: MICROWAVE COOKING DEVICE FOR CRISPING

Atty. Docket: ST288/OST20

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to:

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On November 13, 2003
Date

Memorie Stofferahn
Signature

Memorie Stofferahn
Typed or printed name of person signing Certificate

Enclosures:

- Provisional Application for Patent Cover Sheet
- Provisional Patent Application including:
 - 6 sheets of specification
 - 1 sheet of drawings
- Declaration and Power of Attorney
- Assignment with Recordation Form Cover Sheet
- Fee Transmittal
- Check in the amount of \$120.00 for filing fee
- Return postcard

5 **IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Provisional Patent Application Under 37 C.F.R. §1.53(c)

10 **for**

MICROWAVE COOKING DEVICE FOR CRISPING

15 **BACKGROUND OF THE INVENTION**

 The present invention relates to the field of cooking devices, and, more particularly, to cooking devices for use in a microwave oven for cooking and crisping meats, vegetables, and other food products.

20 Consumers often prefer to cook food in a microwave oven rather than conventional ovens because of the reduced cooking time required to heat foods in a microwave oven. Consumers also want to be provided with the opportunity to cook pre-packaged food products in the package in which they were purchased without the hassle of transferring the food from one container to the next.

25 Unfortunately, when microwave cooking foods, which are preferably served browned and crispy, such as breaded fish or French fries, they tend to become soggy. As such, many people consider microwave cooking to be problematic and generally undesirable.

 One method for improving the texture and consistency of these foods when cooking using a microwave oven is to use susceptors to assist in cooking the food, for example, the

susceptors described in U.S. Patent No. 5,614,259, which is incorporated herein by this reference.

Susceptors are employed in the preparation of food products in microwave ovens to convert some of the microwave energy to heat in order to assist in cooking the food by conduction, convection and/or radiant heating, as well as microwave radiation. Specifically, 5 susceptors are often used to assist in the preparation of food, which, when cooked desirably, should have a browned or crispy exterior surface. Susceptors are applied to the cooking surfaces of utensils, portions of packaged food products, and a food wrap for a food product.

Since susceptors are brought into contact with foods intended for human consumption, it 10 is necessary to encapsulate the microwave interactive material within films or the like that are approved for contact with food, thus resulting in a multi-layer susceptor product (sometime referred to hereinafter as "susceptor film"). Customarily, the susceptor product comprises a base sheet, such as paper or cardboard, a thin film or foil of microwave interactive material, such as aluminum and other selected metals and alloys, and a heat resistant barrier film overlying the 15 metal film or foil.

The multi-layer sheet is generally wrapped around or placed adjacent food being packaged in a microwave cooking container to facilitate cooking of the food product. In such an arrangement, the food product is not completely surrounded by the susceptor film, for example, when the susceptor film is wrapped around the food product, the ends of the food product do not 20 receive the benefits of being exposed to the susceptor film. However, if the ends were closed off, steam generated from the food would accumulate, causing the food product to become soggy.

It is therefore the paramount object of the present invention to provide a microwave cooking device for crisping a food product, which allows the food product to be surrounded by the susceptor film, to maximize crisping and browning, without the risk of becoming soggy.

This and other objects and advantages of the present invention will become apparent upon a reading of the following description.

DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of an embodiment of a cooking device made in accordance with the present invention, with the internal crisping container removed from the outer packaging for clarity.

DETAILED DESCRIPTION OF THE INVENTION

The present invention is a microwave cooking device for crisping food product. With reference to Figure 1, the device 10 generally includes an outer packaging 30 and an internal crisping container 14, having susceptor film incorporated within the volume defined by the container 14 to facilitate browning and crisping. For example, it is preferred that the inner surface (not shown) of the container 14 be coated with susceptor film. Alternatively, at least one discrete piece of susceptor film may be placed within the volume defined by the device 10.

The container 14 has an open cooking environment to allow moisture generated during preparation to escape, keeping the food product from becoming soggy. An open cooking environment is one which does not have a fixed volume while the food product is being prepared (i.e., while the food product is being cooked in the microwave oven using the device 10 of the present invention). For example, as shown in Figure 1, it is preferred that the container 14 define

a plurality of openings 24 which readily allow moisture to escape from the container 14 during preparation, but are not large enough to allow the food product to escape the container 14.

After food product has been delivered to the crisping container 14, the container 14 is preferably placed within the outer packaging 30, which is sealed to maintain the integrity of the food product during storage. Although the container 14 may be removed from the outer packaging 30 prior to preparation, it is preferred that one or more apertures 36 are created in the outer packaging 30 just prior to preparation to allow the moisture generated from the food product to escape, first through the openings 24 defined by the container 14, and then through the apertures 26 defined by the outer packaging 30. The outer packaging 30 preferably includes one or more aperture forming strips 32, 32', which may be grasped and peeled away from the outer packaging 10, leaving the one or more apertures 36.

Of course, the cooking device 10 of the present invention may take various forms as long as the crisping container 14 has an open cooking environment and incorporates susceptor film within the volume defined by the container 14. For example and with reference to Figure 1, the container 14 may be a heat sealed cooking bag which is compatible with vertical fill automated machines. A vertical fill automated machine is commonly used to deliver food product to a storage bag. These automated machines have the capacity to fill numerous storage bags at a very rapid rate, making them popular devices in the food packaging industry. As such, it is preferred that the container 14 of the present invention has an overall shape that allows it to be loaded into and used with a standard vertical fill automated machine as is commonly used in the food storage and preparation industry. The vertical fill automated machine is used to deliver food product to the container 14 through the opening 19 and thereafter seal the opening 19. The opening 19 is

preferably sealed using a heat seal, such that the food product within the container 14 will not escape during storage and preparation.

Of course, the depicted embodiment is merely exemplary and it is contemplated that containers having a variety of structural features could be used without departing from the spirit and scope of the present invention. It will be obvious to those skilled in the art that other modifications may be made to the invention described herein without departing from the spirit and scope of the present invention.

SAMPLE CLAIMS

1. A microwave cooking device for crisping food product, comprising:

an internal crisping container including susceptor film and having an open
5 cooking environment for allowing moisture generated during preparation of the food product to
escape from the internal crisping container; and

a outer packaging for holding the internal crisping container, including at least
one aperture-forming strip for creating an aperture defined by the outer packaging prior to
preparation the food product, the aperture for allowing moisture generated during preparation of
10 the food product to escape from the outer packaging, keeping the food product from becoming
soggy.

2. The microwave cooking device of claim 1, wherein the open cooking
environment of the crisping container is characterized by a plurality of openings.

15

3. The microwave cooking device of claim 1, wherein the crisping container is
compatible with a vertical fill automated machine.

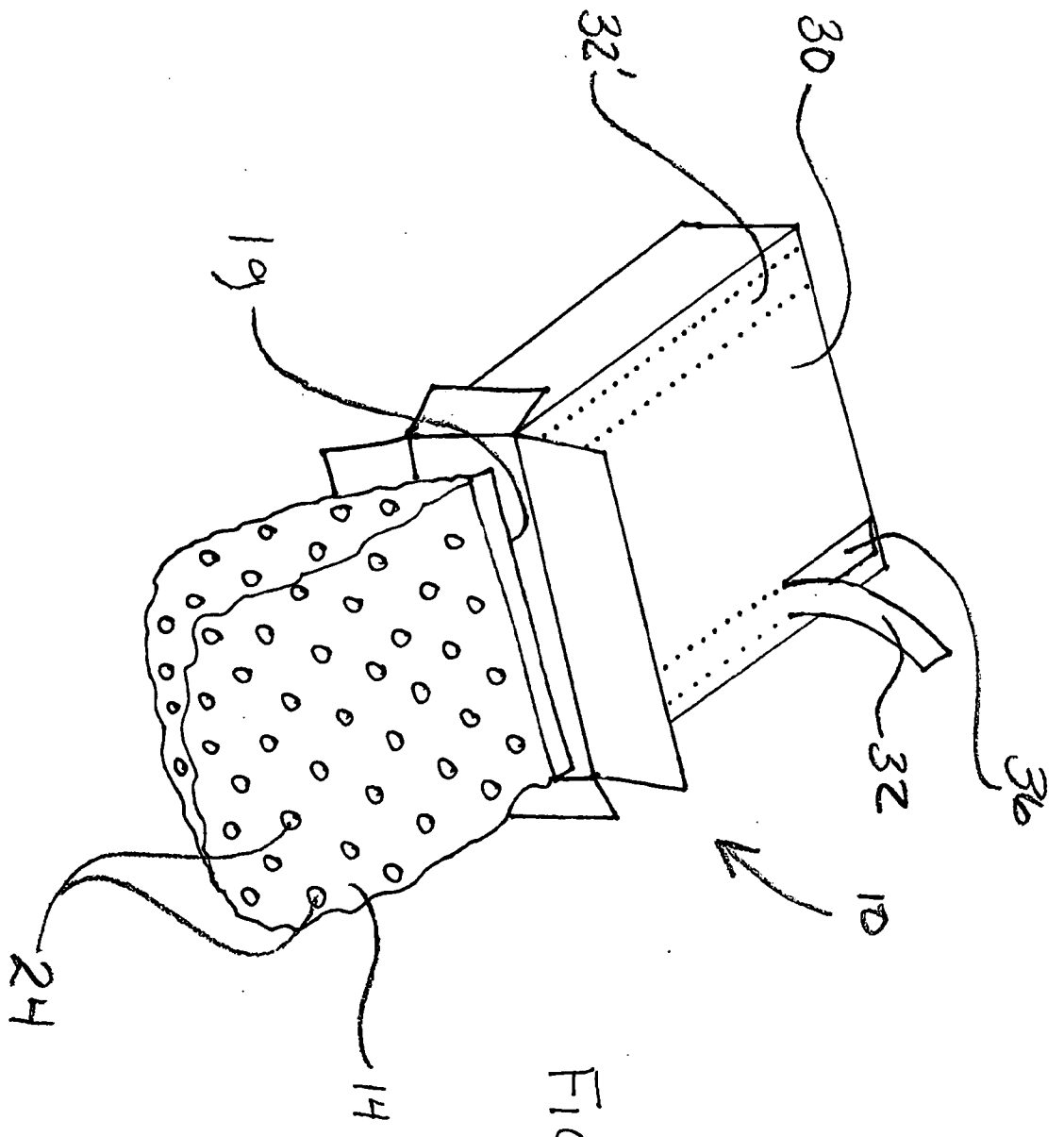


FIGURE 1

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled MICROWAVE COOKING DEVICE FOR CRISPING, the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)	Priority claimed
<u>NONE</u>	<u> </u>
(Number) (Country) (Day/Month/Year filed)	Yes No

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>NONE</u>	<u> </u>	<u> </u>
(Appln. Serial No.)	(Filing Date)	(Status)
		(patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

And I hereby appoint the practitioners at Customer Number 24350 as my attorneys to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith, and I request that all communications concerning this application be addressed to Mandy V. Wilson, Stites & Harbison, PLLC, 400 West Market Street, Suite 1800, Louisville, Kentucky 40202-3352, telephone (502) 587-3400.

Full name of sole inventor Gary L. Hopkins, Sr.

Inventor's signature Gary L. Hopkins Sr. Date: 11-12-03

Residence 2128 South Leslie Lane, Scottsburg, IN 47170

Citizenship U.S.A.

Post Office Address same as residence

Note: This Declaration and Power of Attorney may be executed only when attached to the specification (including claims) as the last page thereof.